II. REMARKS/ARGUMENTS

A. Summary of Amendments

The application still contains 19 claims.

Claims 1, 9, 18 and 19 were amended in order to clarify the subject matter being claimed in the application.

Claim 9 was also amended in order to correct a minor typographical error detected by the Applicant.

It is respectfully submitted that no new subject matter is being added to the application by the present amendments.

B. Statements of Rejection and Reply

Rejection Under U.S.C. §102

In the Office Action, the Examiner has rejected claims 1-5 and 18-19 under 35 U.S.C. 102(b) as being anticipated by U.S. Patent Number 5,249,226 (hereafter referred to as Schopfer). The Applicant respectfully submits that claims 1-5 and 18-19 distinguish clearly and patentably over the cited art for the reasons presented below.

Claims 1 and 19

The Examiner's attention is directed to the following limitations of claims 1 and 19 [emphasis added]:

1) A feed arrangement for a telephone subscriber loop having a plurality of conductors, comprising:

   a) an output for connection to the conductors of the loop to impress across the conductors of the loop a voltage differential; and

   c) a control element operative for:

      <u>i.</u> **deriving a data element indicative of a rate of change of a current in the subscriber loop;**

      <u>ii.</u> **processing the data element indicative of a rate of change of a current in the subscriber loop to detect a change in the number of CPEs active in the telephone subscriber loop;**

      <u>iii.</u> **in response to a change in the number of CPEs active in the telephone subscriber loop, regulating a magnitude of a current in the subscriber loop to a target value selected in a set of target values in dependence upon a number of CPEs active in the telephone subscriber loop.**

19) A feed arrangement for a telephone subscriber loop having a plurality of conductors, comprising:

   a) output means for connection to the conductors of the loop to impress across the conductors of the loop a voltage differential; and

   c) control means for:

      i. **deriving a data element indicative of a rate of change of a current in the subscriber loop;**

      ii. **processing the data element indicative of a rate of change of a current in the subscriber loop to detect a change in the number of CPEs active in the telephone subscriber loop;**

      iii. **in response to a change in the number of CPEs active in the telephone subscriber loop, regulating a magnitude of a current in the subscriber loop to a target value selected in a set of target values in dependence upon a number of CPEs active in the telephone subscriber loop.**

The Applicant respectfully submits that Schopfer does not disclose, teach or suggest the claimed invention. Without limiting the generality of the foregoing, the reference does not disclose, teach or suggest the above-emphasized portions of claims 1 and 19. Specifically, Schopfer does not teach or suggest "deriving a data element indicative of a rate of change of a current in the subscriber loop;" and "processing the data element indicative of a rate of change of a current in the subscriber loop to detect a change in the number of CPEs active in the telephone subscriber loop" and "in response to a change in the number of CPEs active in the telephone subscriber loop, regulating a magnitude of a current in the subscriber loop to a target value selected in a set of target values in dependence upon a number of CPEs active in the telephone subscriber loop".

On page 2 of the Office Action, the Examiner refers to column 1, lines 54-65 of Schopfer and states that "the target value is set depending on load level on the subscriber loop". Column 1, lines 57-61 of the cited passage has been reproduced below [emphasis added]:

> "The apparatus receives a <u>load</u> indicating current from the <u>load</u> which indicates changes in the <u>load</u> voltage and generates an output current responsive to the changes in the <u>load</u> voltage according to a predetermined response profile."

However, nowhere in the Schopfer patent is it taught or suggested to derive a data element indicative of a rate of change of a current in the subscriber loop and to process this data element "to detect a change in the number of CPEs active in the telephone subscriber loop".

Thus, it is respectfully submitted that the above-emphasized limitations of claims 1 and 19 are neither taught nor suggested by Schopfer. In view of the foregoing, the Examiner is respectfully requested to withdraw his rejection of claims 1 and 19.

Claims 2-5

Claims 2-5 are dependent on claim 1 and therefore incorporate all of the limitations of claim 1. Hence, for the same reasons as those set forth herein above with respect to claim 1, it is Applicant's respectful submission that claims 2-5 distinguish over the cited reference.

Claim 18

The Examiner's attention is directed to the following excerpt of claim 18 [emphasis added]:

18.   A method for regulating the magnitude of current in a subscriber loop,

comprising:

a) regulating the magnitude of the current to a first target value when a first CPE is active in the subscriber loop;

b) **deriving a data element indicative of a rate of change of a current in the subscriber loop;**

c) **processing the data element indicative of a rate of change of a current in the subscriber loop to detect an increase in the number of CPEs active in the telephone subscriber loop;**

d) **in response to an increase in the number of CPEs active in the telephone subscriber loop, regulating the magnitude of the current to a second target value, higher than the first target value when at least one additional CPE becomes active in the subscriber loop such that the subscriber loop feeds at least two CPEs simultaneously.**

The Applicant respectfully submits that Schopfer does not disclose, teach or suggest the claimed invention. Without limiting the generality of the foregoing, the reference does not disclose, teach or suggest the above-emphasized portions of claim 18. Specifically, Schopfer does not teach "deriving a data element indicative of a rate of change of a current in the subscriber loop" and "processing the data element indicative of a rate of change of a current in the subscriber loop to detect an increase in the number of CPEs active in the telephone subscriber loop" and "in response to an increase in the number of CPEs active in the telephone subscriber loop, regulating the magnitude of the current to a second target value, higher than the first target value when at least one additional CPE becomes active in the subscriber loop such that the subscriber loop feeds at least two CPEs simultaneously".

For the same reasons presented herein above with respect to claims 1 and 19, it is respectfully submitted that the above-emphasized limitations of claim 18 are neither taught nor suggested by Schopfer. In view of the foregoing, the Examiner is respectfully requested to withdraw his rejection of claim 18.

Rejection Under U.S.C. §103

In the Office Action, the Examiner has rejected claims 6-17 under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent Number 5,249,226 (hereafter referred to as Schopfer) in view of US. Patent Number 5,333,196 (hereafter referred to as Jakab).

The Applicant respectfully submits that claims 6-17 distinguish clearly and patentably over the cited art for the reasons presented below.

Claims 6-8

Claims 6-8 are dependent on claim 1 and therefore incorporate all of the limitations of claim 1. Hence, for the same reasons as those set forth herein above with respect to claim 1, it is Applicant's respectful submission that Schopfer does not disclose, teach or suggest all the limitations of claims 6-8, including "deriving a data element indicative of a rate of change of a current in the subscriber loop;" and "processing the data element indicative of a rate of change of a current in the subscriber loop to detect a change in the number of CPEs active in the telephone subscriber loop" and "in response to a change in the number of CPEs active in the telephone subscriber loop, regulating a magnitude of a current in the subscriber loop to a target value selected in a set of target values in dependence upon a number of CPEs active in the telephone subscriber loop". These limitations are also not taught by Jakab.

Hence, for the reasons set forth herein above and for the reasons set forth with respect to claim 1, it is Applicant's respectful submission that claims 6-8 distinguish over the cited references.

Claim 9

The Examiner's attention is directed to the following excerpt of claim 9 [emphasis added]:

9) In combination:
   a) a power supply;
   b) a feed arrangement for a telephone subscriber loop having a plurality of conductors, including:
   i) an input connected to said power supply;
   ii) an output for connection to the conductors of the subscriber loop to impress across the conductors of the subscriber loop a voltage differential; and
   iv) a control element operative for:
       a. **deriving a data element indicative of a rate of change of a current in the subscriber loop;**

    b.   processing the data element indicative of a rate of change of a current in the subscriber loop to detect a change in the number of CPEs active in the telephone subscriber loop;

    c.   in response to a change in the number of CPEs active in the telephone subscriber loop, regulating a magnitude of a current in the subscriber loop to a target value selected in a set of target values in dependence upon a number of CPEs active in the telephone subscriber loop.

As already set forth herein above with respect to claim 1, Schopfer does not disclose, teach or suggest "deriving a data element indicative of a rate of change of a current in the subscriber loop;" and "processing the data element indicative of a rate of change of a current in the subscriber loop to detect a change in the number of CPEs active in the telephone subscriber loop" and "in response to a change in the number of CPEs active in the telephone subscriber loop, regulating a magnitude of a current in the subscriber loop to a target value selected in a set of target values in dependence upon a number of CPEs active in the telephone subscriber loop". These limitations are also not taught by Jakab.

Thus, it is respectfully submitted that the above-emphasized limitations of claim 9 are neither taught nor suggested by Schopfer in view of Jakab. In view of the foregoing, the Examiner is respectfully requested to withdraw his rejection of claim 9.
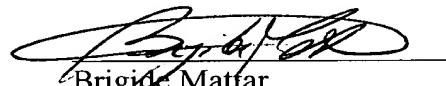
Claims 10-17

Claims 10-17 are dependent on claim 9 and therefore incorporate all of the limitations of claim 9. Hence, for the same reasons as those set forth herein above with respect to claim 9, it is Applicant's respectful submission that claims 10-17 distinguish over the cited references.

III. CONCLUSION

In view of the above, it is respectfully submitted that claims 1-19 are in condition for allowance. Reconsideration of the rejections and objections is requested. Allowance of claims 1-19 at an early date is solicited.

If the claims of the application are not considered to be in full condition for allowance, for any reason, the Applicant respectfully requests the constructive assistance and suggestions of the Examiner in drafting one or more acceptable claims or in making constructive suggestions so that the application can be placed in allowable condition as soon as possible and without the need for further proceedings.

Respectfully submitted,
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